



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,488	12/14/2000	Masatoshi Takaira	018656-196	8369
21839 7590 03/22/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER LETT, THOMAS J	
			ART UNIT 2625	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/22/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/735,488

Applicant(s)

TAKAIRA ET AL.

Examiner

Thomas J. Lett

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-17,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 and 18 is/are allowed.
- 6) ☒ Claim(s) 1-5,7-17,19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Arguments***

1. Applicant argues that Claim 1 is allowable at least because Nagashima does not disclose the claimed subject matter relating to a signal generator that generates a signal based on an operation timing of a printing unit, and a switching means that, in response to the signal, switches the bus between transmissions from the image reader to the external computer and transmission from the external computer to the printing unit.

Rather, the image clock and sync signal are used to encrypt the data, and a switching means does not switch transmissions of the bus in response to the image clock signal or the sync signal. Applicant is focused on the encryption data. The image data is also being transferred on the path/bus and traverses the path in a bi-directional manner that reads on the claims.

Examiner explains that Nagashima et al disclose the bi-directional transfer of data using one bus as shown in Fig. 4 and explained in col. 6, lines 33-40. Here, data moves bi-directionally (col. 6, lines 40-41) between an external computer and a copier 41. The teaching disclosed by Nagashima et al explains that (1) color image data travels from the scanner 42 to the external controller 34 and (2) from the external controller to the copier 35. The image processing circuit 40 with CPU (not shown) controls operation of the color copying apparatus 35, Fig. 4, to and from, the external controller, therefore it switches the direction of the bus.

Art Unit: 2625

Applicant further argues that Nagashima does not state that the clock signal is based on operation timing for each pixel. Additionally, a word search was performed in Nagashima and the word "pixel" only appears in column 13, line 64 and is unrelated to the above-noted subject matter.

Examiner responds that image data transferred via clock signals of Fig. 5 between the devices reads on each pixel.

Claims 17-20 recite that the bus is switched, and switched back again repeatedly and at predetermined fixed intervals. This is inherently set by the timing of the clock signal or the oscillator that synchronizes the data transfer on the data transfer path and Nagashima discloses such in Fig. 5.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, and 7-16, 17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagashima et al (USPN 5,581,613).

With respect to claim 1, Nagashima et al disclose a digital copying machine (color copying apparatus 35, Fig. 4) comprising:

Art Unit: 2625

an image reader (scanner unit 42, Fig. 4) that reads an image of the original document and generates image data,

a printing unit (printing unit 43, Fig. 4) that prints based on image data,

a bus (see Fig. 4, the bus extends from circuit 50 to scanner 42 and printer 43) that transmits the image data generated by the image reader (scanner unit 42) to an external computer (external controller 4, col. 3, lines 7-9) and that transmits image data from the external computer to the printing unit (color image data is supplied by the controller 34 to the printing unit 43),

a signal generator (image clock, Fig. 5) that generates a signal based on an operation timing (this is inherently done since an image sync signal would be in synchronization with the printer when the data is intended for printing) of the printing unit (printing unit 43, Fig. 4), and

switching means (image processing circuit 40 with CPU (not shown) controls operation of the color copying apparatus 35, Fig. 4) that, in response to the signal, switches the bus between transmission from the image reader (see Fig. 4 where data flows to the external controller 34 and back to the color copying apparatus 35 for printing on printer unit 43, col. 6, lines 27-49) to the external computer and transmission from the external computer (34) to the printing unit.

With respect to claim 2, Nagashima et al disclose a digital copying machine as claimed in claim 1, said signal generated by the signal generator (image clock, col. 3, line 33) is a clock signal issued based on an operation timing for each pixel (image sync signal, col. 3, line 33).

Art Unit: 2625

With respect to claim 3, Nagashima et al disclose a digital copying machine as claimed in claim 1, said signal generated by the signal generator is a horizontal synchronization signal issued based on an operation timing for each line (see Figs. 2 and 5).

With respect to claim 4, Nagashima et al disclose a digital copying machine as claimed in claim 1, said bus includes a read buffer that temporarily stores the image data read by the image reader (FIFO buffer 141 is shown in Fig. 6).

With respect to claim 5, Nagashima et al disclose a digital copying machine as claimed in claim 1, said bus includes a print buffer that temporarily stores the image data sent by the external computer (FIFO buffer 133 is shown in Fig. 6).

Claim 7, a method claim, is rejected for the same reason as that of claim 1.

Claim 8, a method claim, is rejected for the same reason as that of claim 2.

Claim 9, a method claim, is rejected for the same reason as that of claim 3.

Claim 10, a method claim, is rejected for the same reason as that of claim 4.

Claim 11, a method claim, is rejected for the same reason as that of claim 5.

Art Unit: 2625

Claim 12, a method claim, is rejected for the same reason as that of claim

1.

Claim 13, a method claim, is rejected for the same reason as that of claim

2.

Claim 14, a method claim, is rejected for the same reason as that of claim

3.

Claim 15, a method claim, is rejected for the same reason as that of claim

4.

Claim 16, a method claim, is rejected for the same reason as that of claim

5.

With respect to claim 17, Nagashima et al disclose a digital copying machine of claim 1, wherein the switching means switches the bus between transmission from the image reader to the external computer and transmission from the external computer to the printing unit and back again repeatedly and at predetermined fixed intervals (this is inherently done since an image sync signal would be in synchronization with the printer/scanner when the data is intended for printing/scanning. The half-period of the oscillator timing determines when data is sent).

With respect to claim 19, Nagashima et al disclose a method of claim 7, comprising switching the bus between transmission from the image reader to the external computer and transmission from the external computer to the printing unit and back again repeatedly and at predetermined fixed intervals (this is inherently done since an image sync signal would be in synchronization with the

Art Unit: 2625

printer/scanner when the data is intended for printing/scanning. The half-period of the oscillator timing determines when data is sent).

With respect to claim 20, Nagashima et al disclose a Controller of claim 12, wherein the switching means switches the bus between transmission from the image reader to the external computer and transmission from the external computer to the printing unit and back again repeatedly and at predetermined fixed intervals (this is inherently done since an image sync signal would be in synchronization with the printer/scanner when the data is intended for printing/scanning. The half-period of the oscillator timing determines when data is sent).

Allowable Subject Matter

3. Claims 6 and 18 are allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

Art Unit: 2625


calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Lett whose telephone number is (571) 272-7464. The examiner can normally be reached on 7-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJL



KING Y. POON
PRIMARY EXAMINER